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PTO/SB/02A (3-97)
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Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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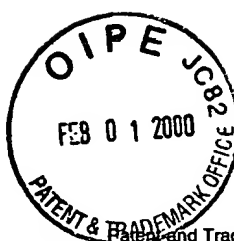
DECLARATION	ADDITIONAL INVENTOR(S) Supplemental Sheet Page <u>1</u> of <u>1</u>
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Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor					
Given Name (first and middle [if any])				Family Name or Surname			
Mark G.				Allen			
Inventor's Signature	<i>Mark G Allen</i>					Date	12/14/99
Residence: City	Atlanta	State	GA	Country	US	Citizenship	US
Post Office Address	425 Spalding Drive						
Post Office Address							
City	Atlanta	State	GA	ZIP	30328	Country	US
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor					
Given Name (first and middle [if any])				Family Name or Surname			
Inder-Jeet				Gujral			
Inventor's Signature						Date	
Residence: City	Cambridge	State	MA	Country	US	Citizenship	US
Post Office Address	111-9 Trowbridge Street						
Post Office Address							
City	Cambridge	State	MA	ZIP	02138	Country	US
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor					
Given Name (first and middle [if any])				Family Name or Surname			
Inventor's Signature						Date	
Residence: City		State		Country		Citizenship	
Post Office Address							
Post Office Address							
City		State		ZIP		Country	

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

GTRC 2139

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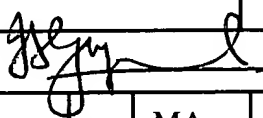
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DECLARATION

ADDITIONAL INVENTOR(S)
Supplemental Sheet
Page 1 of 1

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor					
Given Name (first and middle [if any])				Family Name or Surname			
Mark G.				Allen			
Inventor's Signature						Date	
Residence: City	Atlanta	State	GA	Country	US	Citizenship	US
Post Office Address	425 Spalding Drive						
Post Office Address							
City	Atlanta	State	GA	ZIP	30328	Country	US
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor					
Given Name (first and middle [if any])				Family Name or Surname			
Inder-Jeet				Gujral			
Inventor's Signature						Date	12/15/99
Residence: City	Cambridge	State	MA	Country	US	Citizenship	US
Post Office Address	111-9 Trowbridge Street						
Post Office Address							
City	Cambridge	State	MA	ZIP	02138	Country	US
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Given Name (first and middle [if any])				Family Name or Surname			
Inventor's Signature						Date	
Residence: City		State		Country		Citizenship	
Post Office Address							
Post Office Address							
City		State		ZIP		Country	

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GTRC 2139

11326/10

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DECLARATION — Utility or Design Patent Application

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application or PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)

☐ Additional U.S. or PCT international application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

☐ Customer Number

OR

☒ Registered practitioner(s) name/registration number listed below

Place Customer
Number Bar Code
Label here

Name	Registration Number	Name	Registration Number
Patrea L. Pabst	31,284		
Robert A. Hodges	41,074		
Kevin W. King	42,737		

☐ Additional registered practitioner(s) named on supplemental Registered Practitioner Information sheet PTO/SB/02C attached hereto.

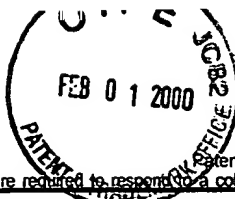
Direct all correspondence to: ☐ Customer Number or Bar Code Label ☒ Correspondence address below

Name	Patrea L. Pabst				
Address	Arnall Golden & Gregory, LLP				
Address	2800 One Atlantic Center, 1201 West Peachtree Street				
City	Atlanta	State	GA	ZIP	30309-3450
Country	United States	Telephone	(404)873-8794	Fax	(404)873-8795

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor:		<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle [if any])			Family Name or Surname		
Mark R.			Prausnitz		
Inventor's Signature					Date
Residence: City		State	Country	Citizenship	
Decatur		GA	US	US	
Post Office Address					
417 West Howard Avenue					
Post Office Address					
City	State	ZIP	Country		
Decatur	GA	30030	US		

☒ Additional inventors are being named on the 1 supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto



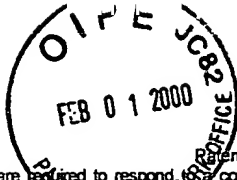
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STATEMENT CLAIMING SMALL ENTITY STATUS (37 CFR 1.9(f) & 1.27(d))--NONPROFIT ORGANIZATION		Docket Number (Optional) GTRC 2139
Applicant, Patentee, or Identifier: <u>Georgia Tech Research Corporation</u>		
Application or Patent No.: <u>09/453,109</u>		
Filed or Issued: <u>December 2, 1999</u>		
Title: <u>MICRONEEDLE DEVICE FOR EXTRACTION AND SENSING OF BODILY FLUIDS</u>		
I hereby state that I am an official empowered to act on behalf of the nonprofit organization identified below:		
NAME OF NONPROFIT ORGANIZATION <u>Georgia Tech Research Corporation</u>		
ADDRESS OF NONPROFIT ORGANIZATION <u>400 Tenth Street, Centennial Research Building</u> <u>Atlanta, Georgia 30332-0415</u>		
TYPE OF NONPROFIT ORGANIZATION:		
<input type="checkbox"/> UNIVERSITY OR OTHER INSTITUTION OF HIGHER EDUCATION		
<input type="checkbox"/> TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE (26 U.S.C. 501(a) and 501(c)(3))		
<input checked="" type="checkbox"/> NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF STATE OF THE UNITED STATES OF AMERICA (NAME OF STATE <u>Georgia</u>) (CITATION OF STATUTE <u>O.C.G.A. 14-3-101, et seq.</u>)		
<input type="checkbox"/> WOULD QUALIFY AS TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE (26 U.S.C. 501(a) and 501(c)(3)) IF LOCATED IN THE UNITED STATES OF AMERICA		
<input type="checkbox"/> WOULD QUALIFY AS NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF STATE OF THE UNITED STATES OF AMERICA IF LOCATED IN THE UNITED STATES OF AMERICA (NAME OF STATE _____) (CITATION OF STATUTE _____)		
I hereby state that the nonprofit organization identified above qualifies as a nonprofit organization as defined in 37 CFR 1.9(e) for purposes of paying reduced fees to the United States Patent and Trademark Office regarding the invention described in:		
<input type="checkbox"/> the specification filed herewith with title as listed above.		
<input checked="" type="checkbox"/> the application identified above.		
<input type="checkbox"/> the patent identified above.		
I hereby state that rights under contract or law have been conveyed to and remain with the nonprofit organization regarding the above identified invention. If the rights held by the nonprofit organization are not exclusive, each individual, concern, or organization having rights in the invention must file separate statements as to their status as small entities and that no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).		
Each person, concern, or organization having any rights in the invention is listed below:		
<input type="checkbox"/> no such person, concern, or organization exists.		
<input checked="" type="checkbox"/> each such person, concern, or organization is listed below. <u>Redeon, Inc., 124 Mt. Auburn Street, Suite 200N, Cambridge, Massachusetts 02138</u>		
I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))		
Barry Rosenberg		
NAME OF PERSON SIGNING <u>Director, Technology Licensing</u>		
TITLE IN ORGANIZATION OF PERSON SIGNING _____		
ADDRESS OF PERSON SIGNING <u>400 Tenth Street, Atlanta, Ga 30332-0415</u>		
SIGNATURE <u>[Signature]</u> DATE <u>December 22, 1999</u>		

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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GTRC 2139 11326/10



STATEMENT CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) & 1.27(c))--SMALL BUSINESS CONCERN

Docket Number (Optional)
GTRC 2139

Applicant, Patentee, or Identifier: Mark R. Prausnitz, Mark G. Allen, and Inder-Jeet Gujral
Application or Patent No.: 09/453,109
Filed or Issued: December 2, 1999
Title: MICRONEEDLE DEVICE FOR EXTRACTION AND SENSING OF BODILY FLUIDS

I hereby state that I am

- ☐ the owner of the small business concern identified below:
☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN Redeon, Inc.

ADDRESS OF SMALL BUSINESS CONCERN 124 Mt. Auburn Street, Suite 200N
Cambridge, Massachusetts 02138

I hereby state that the above identified small business concern qualifies as a small business concern as defined in 13 CFR Part 121 for purposes of paying reduced fees to the United States Patent and Trademark Office. Questions related to size standards for a small business concern may be directed to: Small Business Administration, Size Standards Staff, 409 Third Street, SW, Washington, DC 20416.

I hereby state that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention described in:

- ☐ the specification filed herewith with title as listed above.
☒ the application identified above.
☐ the patent identified above.

If the rights held by the above identified small business concern are not exclusive, each individual, concern, or organization having rights in the invention must file separate statements as to their status as small entities, and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern, or organization having any rights in the invention is listed below:

- ☐ no such person, concern, or organization exists.
☒ each such person, concern, or organization is listed below. Georgia Tech Research Corporation
400 Tenth Street, Centennial Research Building, Atlanta, Georgia 30332-0415

Separate statements are required from each named person, concern or organization having rights to the invention stating their status as small entities. (37 CFR 1.27)

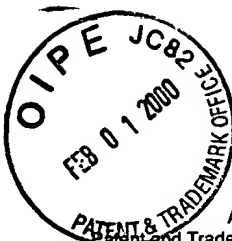
I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

NAME OF PERSON SIGNING INDER-JEET GUJRAL

TITLE OF PERSON IF OTHER THAN OWNER —

ADDRESS OF PERSON SIGNING 111-9 TROWBRIDGE ST., CAMBRIDGE MA

SIGNATURE [Signature] DATE 12/15/99



Please type a plus sign (+) inside this box → ☐

PTO/SB/01 (12-97)

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Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63) <input type="checkbox"/> Declaration Submitted with Initial Filing OR <input checked="" type="checkbox"/> Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)	Attorney Docket Number	GTRC 2139
	First Named Inventor	Mark R. Prausnitz
	COMPLETE IF KNOWN	
	Application Number	09 / 453,109
	Filing Date	December 2, 1999
	Group Art Unit	1743
	Examiner Name	

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

MICRONEEDLE DEVICE FOR EXTRACTION AND SENSING OF BODILY FLUIDS

the specification of which
☐ is attached hereto
OR
☒ was filed on (MM/DD/YYYY) **December 2, 1999** as United States Application Number or PCT International Application Number **09/453,109** and was amended on (MM/DD/YYYY) (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)	
60/146,200	07/29/1999	<input type="checkbox"/> Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

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GTRC 2139

11326/10

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STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Mark R. Prausnitz, Mark G. Allen, and Inder-Jeet Gujral

Application No./Patent No.: 09/453,109 Filed/Issue Date: December 2, 1999

Entitled: MICRONEEDLE DEVICE FOR EXTRACTION AND SENSING OF BODILY FLUIDS

Georgia Tech Research Corporation, a Corporation
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: _____ To: _____
The document was recorded in the Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.
2. From: _____ To: _____
The document was recorded in the Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.
3. From: _____ To: _____
The document was recorded in the Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

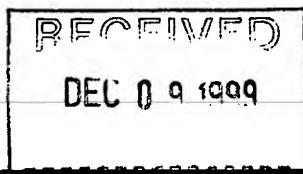
- ☒ Copies of assignments or other documents in the chain of title are attached.

NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302-302.8]

The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of the assignee.

December 22, 1999

Date



[Signature]
Signature

Barry Rosenberg
Typed or printed name
Director, Technology Licensing

Title

ASSIGNMENT

We, Mark R. Prausnitz of 417 West Howard Avenue, Decatur, Georgia 30030, Mark Allen of 425 Spalding Drive, Atlanta, Georgia 30328, and Inder-Jeet Gujral of 111-9 Trowbridge Street, Cambridge, Massachusetts 02138, in consideration of ten dollars and other valuable consideration paid to us by Georgia Tech Research Corporation, a corporation of the State of Georgia, having its principal place of business at 400 Tenth Street, Centennial Research Building, Atlanta, Georgia 30332-0415, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said Georgia Tech Research Corporation, its successors and assigns, the entire interest for the United States of America, and its territories and all foreign countries and jurisdictions, including all rights of priority under the International Convention for the Protection of Industrial Property, in a certain invention or improvement in "*Microneedle Device for Extraction and Sensing of Bodily Fluids*" described in U.S. Application Serial No. 09/453,109 filed in the U.S. Patent and Trademark Office on December 2, 1999, by Mark R. Prausnitz, Mark G. Allen, and Inder-Jeet Gujral, which claims priority to U.S. Provisional Application Serial No. 60/146,200 filed in the United States Patent and Trademark Office on July 29, 1999, by Mark R. Prausnitz, Mark Allen, and Inder-Jeet Gujral, and in all Letters Patent of the United States and its territories and all foreign countries and jurisdictions which may or shall be granted on said invention, or any parts thereof, or on said application, or any provisional, divisional, continuation, continuation-in-part, reissue, or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said corporation and its successors and assigns, but at its or their expense or charges, hereafter to execute all applications, amended specifications, deeds or other instruments, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and its territories and in all other foreign countries and jurisdictions to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation, and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

"Microneedle Device for Extraction and Sensing of Bodily Fluids"
By: Mark R. Prausnitz, Mark G. Allen, and Inder-Jeet Gujral
Filed: December 2, 1999
ASSIGNMENT

And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

WITNESS my hand and seal this 22 day of December, 1999.



Mark R. Prausnitz

State of Georgia)
County of Cobb)

Then personally appeared the above named Mark R. Prausnitz and acknowledged the foregoing instrument to be his free act and deed, before me this 22 day of December, 1999.



Notary Public

My Commission expires: 2-25-03

"Microneedle Device for Extraction and Sensing of Bodily Fluids"
By: Mark R. Prausnitz, Mark G. Allen, and Inder-Jeet Gujral
Filed: December 2, 1999
ASSIGNMENT

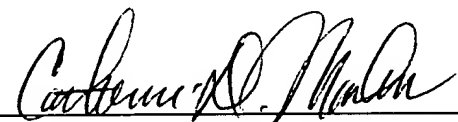
WITNESS my hand and seal this 14th day of December, 1999.


Mark G. Allen

State of Georgia)

County of Fulton)

Then personally appeared the above named Mark G. Allen and acknowledged the foregoing instrument to be his free act and deed, before me this 14th day of December, 1999.


Notary Public

Notary Public, Fulton County, Georgia
My Commission Expires June 10, 2001

Catherine D. Marks

My Commission expires: _____

"Microneedle Device for Extraction and Sensing of Bodily Fluids"
By: Mark R. Prausnitz, Mark G. Allen, and Inder-Jeet Gujral
Filed: December 2, 1999
ASSIGNMENT

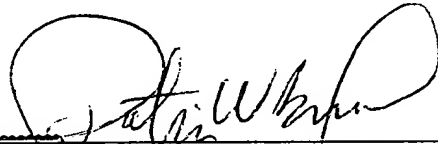
WITNESS my hand and seal this 15th day of DECEMBER, 1999.



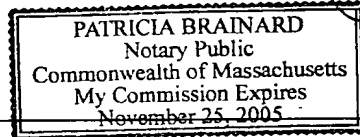
Inder-Jeet Gujral

Commonwealth of Massachusetts)
County of Middlesex)

Then personally appeared the above named Inder-Jeet Gujral and acknowledged
the foregoing instrument to be his free act and deed, before me this 15 day of
DECEMBER, 1999.



Notary Public



My Commission expires: _____